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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,824	09/13/2000	Alan Rowe	103.1046.01	7793

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EXAMINER
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HOANG, PHUONG N

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 10/03/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

PRG

# Office Action Summary

Application No.

09/660,824

Applicant(s)

ROWE, ALAN

Examiner

Phuong N. Hoang

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 - 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 44 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

On claim 44, claimed rebooting the first device cannot be both elective and non-elective functions. Also, takeover of the first device by a second device cannot be both elective and non-elective. It must be one or the other selection at a time.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

**Claims 1 – 5, 8 – 14, 16 – 19, 21 – 26, 29, 33 – 35, 37 – 40, 42, 43, are rejected under 35 U.S.C. 102(e) as being anticipated by French, US patent no. 6,341,312.**

**As to claim 1**, French teaches a method of operating a file server, comprising the steps of:

receiving a CIFS request (CIFS client access network files system, col. 3 lines 25 – 50);

recording state at that time about the request (state information with respect to the server to which the user is connecting, col. 5 lines 35 – col. 6 line 10);

restoring state upon reboot as last recorded (reconnect without requiring the user to re-enter information, col. 5 and col. 6 lines 1 – 26);

attempting to continue the CIFS session that the request was part of (replays the connections, col. 6 lines 20 – 48).

**As to claim 2**, French teaches the method of claim 1, wherein the step of receiving a CIFS request also includes the steps of

acknowledging receipt of the CIFS request; processing the CIFS request (session establishment request is stored ...."permanent", col. 6 lines 5 – 10).

**As to claim 3**, French teaches the method of claim 1, wherein the step of recording state includes determining automatically whether the processing of a CIFS request is at a point where the state can be reliably recorded (it is inherent in maintaining state information).

**As to claim 4**, French teaches the method of claim 3, wherein the step of recording state occurs at points based on the progress of processing of a CIFS request (CIFS, col. 3 lines 25 – 50).

**As to claim 5**, French teaches the method of claim 4, wherein the state is recorded to a non-volatile storage (saved to disk, col. 6 lines 43 – 45).

**As to claim 8**, French teaches the method of claim 1, wherein the step of recording state further comprises the step of determining whether the server shutdown was elective or non-elective (test outcome is negative or positive, col. 6 lines 10 – 20).

**As to claim 9**, French teaches the method of claim 8, wherein the step of determining whether the server shutdown is elective or non-elective is a function of a flag (test, col. 6 lines 10 – 20) value stored in the nonvolatile storage (inherent).

**As to claim 10, 11**, French teaches the method of claim 9, wherein the flag value indicates the server shutdown was elective (positive or negative, col. 6 lines 10 – 20) or non-elective.

**As to claim 12, 16**, French teaches the method of claim 1, wherein the step of recording state further comprises the step of determining whether recovery will be accomplished by rebooting the affected server (the machine is rebooted, col. 6 lines 40 – 45) or takeover by another server.

**As to claim 13, 17**, French teaches the method of claim 1, wherein the step of recording state further comprises the step of determining whether recovery will be accomplished by rebooting the affected server (the machine is rebooted, col. 6 lines 40 – 45) or takeover by another server is a function of the flag value (the test outcome, col. 6 lines 10 – 20) stored in the non-volatile storage (inherent).

**As to claim 14**, French teaches the method of claim 13, wherein the flag value indicates the recovery will be accomplished by rebooting the affected server (if the outcome is positive, the routine reconnect the client to the server, col. 6 lines 15, 45).

**As to claim 18**, French teaches wherein the reboot comprises the steps of:  
rebooting the affected server's operating system (the machine is rebooted, col. 6 lines 40 – 45); and

rebuilding in-memory data structures (data structures, col. 6 lines 40 – 45) to the state prior to the reboot.

**As to claim 19**, the method of claim 18, wherein the rebuilding in-memory data structures further comprises fetching the state stored in the non-volatile storage to rebuild the in-memory data structures (inherent when storing state information).

**As to claim 21**, French teaches the method of claim 1, wherein the step of attempting to continue the CIFS session that the request was part of further comprises the step of processing the remaining portion of the uncompleted request (replays the connections, col. 6 lines 20 – 48).

**As to claim 22**, this is the apparatus claim of claim 1. See claim 1 above for rejection.

**As to claims 23 – 26**, see claims 2 – 5 above.

**As to claim 29**, see claim 8 above.

**As to claims 33 – 35**, see claims 12 – 14 above.

**As to claims 37 - 40**, see claims 16 – 19 above.

**As to claim 42**, see claim 21 above.

**As to claim 43**, French teaches the non-volatile memory having storage capable of holding information, the information including:

Information identifying the state of a first device (state information of the server, col. 5 lines 38 – col. 6 line 20); and

information identifying a flag value (the outcome of the test, col. 6 lines 15 – 20).

***Claim Rejections - 35 USC § 103***

**Claims 6, 7, 27 – 28, 30 - 32, are rejected under 35 U.S.C. 103(a) as being unpatentable over French, US patent no. 6,341,312 in view of Sakakura, US patent no. 6,334,139.**

**As to claim 6, 7**, French teaches the method of claim 1 wherein the step of recording state occurs as part of an elective reboot (test is negative, col. 6 lines 10 – 25) or elective takeover of a server further comprising:

ignoring current CIFS requests (inherent);

French does explicitly teach processing all active CIFS requests.

Sakakura teaches processing all requests (re-boots the server B, the processing system is also restarted, col. 9 lines 22 – 26).

It would have been obvious to apply the teaching of Sakakura to French's system because the system needs to complete to process the requests after rebooting.

**As to claims 27 – 28**, see claims 6 – 7 above.

**As to claims 30 - 32**, see claims 9 – 11 above.

**Claims 15, 20, 36, 41, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over French, US patent no. 6,341,312 in view of Chrabaszcz, US patent no. 6,134,673.**

**As to claim 15, 36,** French does not teach wherein the flag value indicates the recovery will be accomplished by takeover by another server.

Chrabaszcz teaches wherein the flag value indicates the recovery will be accomplished by takeover by another server (instance in which the primary server 102 has failed as indicated by the termination mark 310.....detected the failure of the first server 102 .... Server 104 as the backup server, col. 8 lines 60 – col. 9 lines 15) is a function of the flag value stored in the non-volatile storage.

It would have been obvious to apply the teaching of Chrabaszcz to French's system because provides a design choice for backing up in a network system to ensure recovery.

**As to claim 20, 41,** French modified by Chrabaszcz teaches wherein the takeover (Chrabaszcz, server 104 as the backup server, col. 8 lines 60 – col. 9 lines 15) comprises fetching the stored in the non-volatile storage and rebuilding the in-memory data structures in another server using the state (French, inherent when storing state information).

It would have been obvious to apply the teaching of Chrabaszcz to French's system because provides a design choice for backing up in a network system to ensure recovery.



**As to claim 44**, French teaches the apparatus of claim 43, wherein the flag value is capable of being interpreted to indicate: As rejected in 112 first paragraph above.

rebooting the first device was an elective function (the outcome of the test is negative or positive, col. 6 lines 15 – 20); or

rebooting the first device was a non-elective function (the outcome of the test is positive, col. 6 lines 15 – 20);

French does not teach takeover of the first device by a second device was an elective function; and takeover of the first device by the second device was a non-elective function.

Chrabaszcz teaches:

takeover of the first device (first server 102, col. 8 lines 60 – col. 9 lines 15) by a second device (server 104, col. 9 lines 1 – 40).

It would have been obvious to apply the teaching of Chrabaszcz to the French's system to make one server takeovers the other because the networks system should have many servers.

### ***Conclusion***

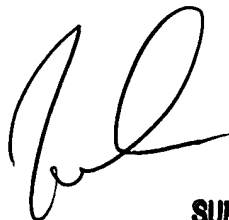
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong N. Hoang whose telephone number is (703) 605-4239. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)746-7140.

Ph

September 26, 2003



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